JOINT BASE CHARLESTON - AIR
ENVIRONMENTAL RESTORATION PROGRAM
NORTH CHARLESTON, SOUTH CAROLINA

STATEMENT OF BASIS FOR NO FURTHER ACTION

SOLID WASTE MANAGEMENT UNIT (SWMU) 84 (OW509)
BUILDING 370 OIL/WATER SEPARATOR SITE

STATEMENT OF BASIS

Joint Base Charleston-Air
North Charleston, South Carolina

Facility/Unit Type: Joint Base Charleston-Air/Solid Waste Management Unit (SWMU 84) (OW509) Building 370 Oil Water Separator Site
Contaminants: None
Media: None

Proposed Remedy: No Further Action (NFA)

Purpose

The purpose of this Statement of Basis (SoB) is to present the decision for SWMU 84 (OW509), which is No Further Action (NFA), and to invite public comment on this proposal. This SoB provides SWMU 84 (OW509) background information and explains the reasons NFA is proposed. See **Figure 1** for a facility location map.

INTRODUCTION

Joint Base Charleston-Air (JB CHS-Air or the Base) is located in Charleston County, approximately 10 miles northwest of Charleston, South Carolina. JB CHS-Air comprises 3,731 acres of contiguous property with a Base population of approximately 8,500.

This Statement of Basis (SoB) pertains to Air Force Environmental Restoration Program (ERP) Site Solid Waste Management Unit (SWMU) 84 – Building 370 Oil Water Separator (OWS) Site, which is included in the JB CHS-Air Resource Conservation and Recovery Act (RCRA) Permit #SC3 570 024 460, dated October 4, 2010 (Permit). The Permit, issued by the South Carolina Department of Health and Environmental Control (SCDHEC), lists SWMU 84 as requiring a RCRA Facility Investigation (RFI).

This SoB explains the rationale for deciding that no further action (NFA) is appropriate for SWMU 84, the site of potential releases from an OWS to surrounding soil and groundwater, based on the results of RFI activities. This document is intended to inform the general public of the NFA determination for SWMU 84 and to provide information on how the public can be involved in the NFA decision process. SCDHEC will not finalize the NFA decision until the public comment period has ended and all information submitted during the public comment period has been reviewed and considered.

This SoB should not be considered the primary source of site information. Documents providing greater site detail are located in the information repository maintained at JB CHS-Air and the SCDHEC office located in Columbia, South Carolina (addresses provided at the conclusion of this document). SCDHEC encourages the public to review these documents in order to gain a more thorough understanding of the site and the activities that have been conducted. A summary of site-specific documents follows:

- RCRA Facility Assessment (RFA) Report, Charleston Air Force Base, South Carolina, A.T. Kearney, Inc., March 1990. Regulatory concurrence was not obtained for the NFA recommendation.

- Installation Restoration Program Draft RCRA Facility Investigation Report for Charleston Air Force Base, South Carolina, Halliburton NUS Corporation, June 1995. Regulatory concurrence was not obtained for the NFA recommendation.
- Informal Technical Information Report, RCRA Facility Investigation Data Gaps for Group II Non-ERA Solid Waste Management Unit 84, Building 370 Oil/Water Separator, Joint Base Charleston-Air, South Carolina, URS Group, Inc., July 2012. In a letter addressed to Ms. Dana Holsclaw, JB CHS-Air, dated September 13, 2012, SCDHEC requested additional soil and groundwater sampling to determine the presence or absence of potential site-related constituents of concern (COCs), primarily arsenic in groundwater and N-Nitrosodimethylamine (NDMA) is soil.
- RFI Data Gap Report Addendum, SWMU 84 – OW509 – Building 370, Oil/Water Separator Site, Joint Base Charleston-Air, South Carolina, URS Group, Inc., April 2015. In a letter addressed to Mr. Al Urrutia, JB CHS-Air, dated June 4, 2015, SCDHEC concurred with the no NFA recommendation for SWMU 84 and requested that a SoB be submitted to SCDHEC.

PROPOSED DECISION

The recommended decision for SWMU 84 is NFA. RFI activities have been completed and no potential COCs exceeded regulatory criteria in site soil or groundwater, primarily arsenic in groundwater and NDMA in soil. Because arsenic in groundwater and NDMA in soil were either below their respective screening criteria or not detected, NFA is recommended for this site. The SCDHEC Bureau of Land and Waste Management, Division of Waste Management, Department of Defense (DoD) Corrective Action Section concurred with the NFA decision in a letter dated June 4, 2015 (SCDHEC, 2015).

SITE BACKGROUND

SWMU 84 is the location of a former OWS located immediately southwest of former Building 370, the Golf Course Snack Bar, and east of the asphalt and concrete covered parking area, as shown in **Figures 1 and 2**. The date that SWMU 84 began operating is unknown, according to Mr. Copes Wannamaker, the Base Storm Water Program Manager. The OWS and all associated appurtenances were removed at the time Building 370 was demolished in 2000; however, a record search revealed no closure report or disposal records. At the time of the field investigation in September 2014, a portion of the former building concrete slab was visible.

The OWS was a concrete structure with dimensions of two feet by two feet by three feet deep. The OWS most recently received water from an ice machine through a floor drain in the snack bar, and had previously received discharges from a grease trap in a sink in the snack bar. The OWS discharged to SWMU 130, the Base sanitary sewer.

The overall topography of the site is generally flat with little to no relief and is at an elevation of approximately 40 feet mean sea level (msl). To the north and east of the SWMU, the surface is grassed and is part of the golf course. Farther east is a hedge row and beyond that is Arthur Drive. To the west is a relatively open wooded area, and farther west is an area of dense undergrowth and woods through which the Base has constructed an obstacle course. To the south is an asphalt covered parking area. Located north of SWMU 84 are SWMU 66/LF004 and SWMU 67/LF017, two landfills, separated by Golf Course Creek. Golf Course Creek, considered the nearest receptor, is approximately 700 feet north of SWMU 84 (see **Figure 2**).

SITE INVESTIGATIONS

1990 RFA

A RFA was performed by A.T. Kearney, Inc. (Kearney) in 1990. Kearney conducted a Visual Site Inspection (VSI) during the 1990 RFA of SWMU 84 and indicated that no releases were observed. Based on the VSI, Kearney recommended NFA (A.T. Kearny, 1990).

1994 RFI

During the 1994 RFI performed by Halliburton NUS Corporation, shallow subsurface soil samples were collected and analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds

(SVOCs), and total petroleum hydrocarbons (TPHs). Analytical results indicated that chlorobenzene and tetrachloroethene (PCE) were detected; however, only PCE was reported above its respective applicable relevant and appropriate requirements (ARAR) in effect at the time. Benzene and toluene were also detected but the results were qualified due to the presence of blank contamination. The 1995 RFI recommended NFA for SWMU 84 (Halliburton NUS Corporation, 1995).

2011 RFI Data Gap Investigation

In October 2011, URS performed a RFI Data Gap Investigation to evaluate the nature and extent of potential COCs at SWMU 84 and to assess whether future environmental site activities were warranted. Two soil borings were advanced to collect surface and subsurface soil samples. The soil samples were laboratory analyzed for VOCs, SVOCs, TPH-diesel range organics (DRO), TPH-gasoline range organics (GRO), and target analyte list (TAL) metals. The soil borings were then advanced to 15 feet below ground surface and converted into groundwater monitoring wells. Groundwater samples collected from the two wells were laboratory analyzed for VOCs, SVOCs, TPH-DRO, TPH-GRO, and TAL metals.

Analytical results indicated that arsenic was detected above its maximum contaminant level (MCL) in groundwater as well as in the associated method blank and an estimated concentration of NDMA exceeded its screening criteria in subsurface soil. Based on the analytical results, the 2011 investigation concluded that SWMU 84 had minimal impact on the environment. Several target analytes reported in surface and subsurface soil exceeded soil screening levels (SSLs); however, target analytes did not exceed screening levels in the associated groundwater samples, indicating that there was little, if any, potential for these analytes in soil to degrade water quality. Based on the sampling results, the report recommended the preparation of a decision document proposing NFA (URS, 2012).

SCDHEC reviewed the RFI Data Gap Report (URS, 2012) and identified additional data gaps in a letter dated September 13, 2012. To address the additional data gaps, SCDHEC requested that JB CHS-Air collect an additional groundwater sample to provide confirmation of the actual presence or absence of arsenic in the groundwater. In addition, NDMA was detected above its Regional Screening Level (RSL) (USEPA, 2015) in subsurface soil. SCDHEC requested that JB CHS-Air collect confirmation soil samples for NDMA analysis.

2015 RFI Data Gap Report Addendum

In September 2014, URS performed a RFI Data Gap Investigation Addendum to address the additional data gaps identified by SCDHEC based on the results of the 2011 RFI Data Gap Investigation. URS collected additional surface and subsurface soil samples for NDMA analysis and additional groundwater samples from one existing groundwater monitoring well for arsenic analysis. The subsurface soil sample was also inadvertently analyzed for arsenic. Analytical results indicated that NDMA was not detected in the September 2014 surface and subsurface soil samples, indicating that NDMA was not present in site soils. The arsenic concentration in subsurface soil was below its Base background level (SCDHEC, 2000). For groundwater, arsenic concentrations were below both the Base background concentration (SCDHEC, 2000) and the MCL. The April 2015 RFI Data Gap Investigation Report Addendum recommended NFA for SWMU 84 (URS, 2015). In a letter dated June 4, 2015, SCDHEC concurred with the NFA recommendation and requested that this SoB be submitted (SCDHEC, 2015).

SUMMARY OF SITE RISKS

Based on results presented in the 2015 RFI Data Gap Report Addendum, site COCs were either not detected or were below regulatory screening criteria. Therefore, SWMU 84 presents no unacceptable risk for any future use. The 2015 RFI Data Gap Report Addendum analytical results are presented on **Figure 2**.

SCOPE OF CORRECTIVE ACTION

NFA is selected for SWMU 84 (OW509).

STATUTORY AUTHORITIES

This document is being issued pursuant to Section 44-56-10 et seq. Regulation 61-79 of the 1976 South Carolina Code of Laws, as amended. The JB CHS-Air Corrective Action Program is conducted under the

authority of Sections 3004 (u), 3004 (v), 3005(c)(3), 3008(h), 3013, 6001, and 7703 of RCRA (42 USC 6901 et seq.) as amended by the Hazardous and Solid Waste Amendment (HSWA) of 1984 (Pub. L. No. 98-616, 98 Stat. 3221) and the Federal Compliance Act of 1992 (FFCA) (Pub. L. J02-386, J06 Stat. 1505). This SoB is part of the corrective action process and is a requirement of RCRA Part B Permit #SC8 170 022 620, issued to JB CHS-Air by SCDHEC.

REFERENCES

A.T. Kearney, Inc., 1990. RCRA Facility Assessment Report, Charleston Air Force Base, South Carolina, March 1990.

Halliburton NUS Corporation, 1995. Installation Restoration Program Draft RCRA Facility Investigation Report for Charleston Air Force Base, South Carolina, June 1995.

South Carolina Department of Environmental Control (SCDHEC), 2000. Base Wide Background Study Letter from David Scaturo to Al Urrutia dated May 15, 2000.

SCDHEC, 2015. Approval, Response to SCDHEC Comments, Errata Pages, and CDs, Final RCRA Facility Investigation (RFI) Data Gap Report Addendum, received April 27, 2015, Solid Waste Management Unit (SWMU) 84. Letter from W. Britton, Jr., June 4, 2015.

URS Group, Inc., 2012. Informal Technical Information Report, RCRA Facility Investigation Data Gaps for Group II Non-ERA Solid Waste Management Unit 84, Building 370 Oil/Water Separator, Joint Base Charleston-Air, South Carolina, July 2012.

URS Group, Inc., 2015 Final RFI Data Gap Report Addendum, SWMU 84 – OW509 – Building 370, Oil/Water Separator Site, Joint Base Charleston-Air. April 2015.

USEPA, 2015. Regional Screening Level Master Table. January.